

APPENDIX I

GLOSSARY AND ACRONYMS

A/A— Air to air.

AAB— Aviation armament bulletin.

AAC— Aviation armament change.

ABSLA— Approved basic stock level of ammunition.

ACM— Air combat maneuver.

AFB— Airframe bulletin.

AFC— Airframe change.

AFTER ENGINE TURNUP— That time in the prior-to-launch phase when the pilot has completed his pretaxi checklist.

AFTER LANDING/GROUND ABORT— That time after landing or ground abort phase when the pilot has completed the after landing checklist.

AIG— Air to ground.

AGM— Air-launched, surface attack, guided missile.

AIM— Air-launched, aerial intercept, guided missile.

AIMD— Aviation intermediate maintenance department.

AIRBORNE STORE— Fuel and spray tanks, nonexpendable training weapons, pods (refueling, gun, ECM, etc.). This includes all similar items intended for carriage by aircraft, including racks, launchers, and detachable pylons that do not normally separate from the aircraft in flight.

AIRBORNE WEAPON— All missiles, rockets, bombs, mines, torpedoes, and all similar items intended for carriage by aircraft that are normally separated from the aircraft in flight.

AIRCRAFT ARMAMENT SYSTEM— Aircraft armament subsystems that, when interconnected, give the aircraft its airborne weapons/stores capability.

AIRCRAFT CONFIGURATION— The system and components required to carry or deliver a specific airborne weapon/store.

AIRCRAFT LOAD PLAN— A chart/form used to assign weapons to a particular bomb rack/station for loading.

AMAC— Aircraft monitor and control. A functional test of the aircraft monitor and control system, release system, and jettison system for nuclear weapons.

AOCS— Aviation ordnance control station.

ARM— Antiradiation missile.

ARM, ARMING— The action that changes ammunition from a safe condition to a state of readiness for initiation.

ASW— Antisubmarine warfare.

AT— Arming time.

ATM— Air-launched, training, guided missile.

AT/PERS— High-explosive antitank/antipersonnel.

ATR— Ammunition transaction report.

AUR— All-up-round. The complete assembly of a weapon normally shipped to the operating forces. The weapon requires no assembly or functional checks before loading on the aircraft for delivery to the target.

AVB— Avionics bulletin.

AVC— Avionics change.

AWB— Airborne weapons bulletin.

AWC— Airborne weapons change.

AYB— Accessory bulletin.

AYC— Accessory change.

BD— Base detonating.

BDU— Bomb dummy unit.

BEFORE ENGINE TURNUP— That time in the prior-to-launch evolution when the pilot is commencing general aircraft ground inspection or checks and extending until the inspections or checks are complete.

BIT, BITE— Built-in test.

BPDSMS— Basic Point Defense Surface Missile System.

CAD— Cartridge-actuated device.

CAIMS— Conventional Ammunition Integrated Management System.

CARTRIDGE— A complete assembly consisting of an initiator and a pressure-producing propellant in a suitable case. Impulse cartridges have no projectiles. A cartridge may be electrically or mechanically fired.

CAUTION— An operating procedure, practice, or condition that, if not strictly observed, could result in damage to or destruction of equipment.

CBU— Cluster bomb unit. It consists of a number of bombs contained in a dispenser or clustering device and suspended from a bomb rack. A CBU may function while on the rack or after release.

CCG— Computer control group.

CCO— Combat cargo officer.

CG— Center of gravity.

CHAFF— A radar reflective material used to deceive or counteract unfriendly radar or destructive offensive ordnance.

CHECKLIST— An individual sequence of procedures bearing a title and constituting a part of a publication designated as the loading checklist.

CINCLANTFLT— Commander-in-Chief Atlantic Fleet.

CINCPACFLT— Commander-in-Chief Pacific Fleet.

CNO— Chief of Naval Operations.

CO— Commanding Officer.

COG— Cognizance symbol, Indicates the command, bureau, or office that has control over supply and/or distribution of the material.

CONVENTIONAL WEAPONS— Nonnuclear weapons. This excludes all biological weapons and generally excludes chemical weapons except for existing smoke, incendiary agents, and agents of riot-control weapons.

CV— Aircraft carrier.

DAAS— Defense Automatic Addressing System.

DEARMING AREA— That area where a weapon is changed from a state of readiness for initiation to a safe condition. When forward-firing weapons are involved, the area ahead of the aircraft must be clear and kept clear until weapon safing procedures are completed.

DODIC— Department of Defense Identification Code.

DOT— Department of Transportation.

DOWNLOADING— An operation that removes airborne weapons/stores from aircraft.

DROPPING SAFE— Releasing an airborne weapon/store in a safe or unarmed condition so that it will not function upon impact.

DST– Destructor.

DTRM– Dual-thrust rocket motor.

DUD– Explosive ammunition that has failed to function.

ECCM– Electronic counter-countermeasures.

ECM— Electronic countermeasures,

EEA— External evidence of arming.

EED— Electroexplosive device.

EMCON– Emission control.

EOD– Explosive ordnance disposal.

ERDL— Extended range data link,

EXPLOSIVE ORDNANCE DISPOSAL UNIT– Personnel with special training and equipment who render explosive ordnance safe, make intelligence reports, and supervise the safe removal of ordnance.

FAE— Fuel-air explosive.

FCLP– Field carrier landing practice.

FFAR— Folding-fin aircraft rocket.

FFT— For further transfer.

FOSAMS— Fleet Optical Scanning Ammunition Marking System.

FORWARD-FIRING WEAPONS— Weapons, such as missiles, rockets, and guns, that are propelled in a forward direction.

FSC– Federal supply class.

FUZE— A term used for the mechanical or electrical device that initiates detonation of an explosive at a desired time.

GBI— Gains by inventory.

GBU— Guided bomb units.

GCBS– Ground controlled bombing system. Weapons are released from the aircraft by a controller on the ground.

GCG— Guidance control group.

GCU– Gun control unit.

GP– General purpose.

GUIDED WEAPON– A weapon that has no propulsion but does have guidance control capability.

HARM— High-speed, antiradiation missile.

HDC– Helicopter Direction Center.

HE– High explosive,

HEAT– High-explosive antitank.

HE-FRAG— High-explosive fragmentation.

HEI– High-explosive incendiary.

HERO– Hazardous electromagnetic radiation to ordnance.

HTW— Helicopter trap weapon.

HUD— Head-up display.

HUNG WEAPON– A weapon that accidentally remains attached to an aircraft after an attempt to release it from the rack.

IF APPLICABLE– Used to preface a step/procedure meaning that, when required, must be performed. When the step/procedure is not required, it may be omitted.

IFOBRL— In-flight operable bomb rack lock.

INTERVALOMETER— An electrical or electromechanical device that controls the release or firing of airborne weapons/stores at a specified interval or sequence.

IPDSMS– Improved Point Defense Surface Missile System.

IPB– Illustrated parts breakdown

IRRP— Improved Rearming Rate Program.

IWHS— Improved Weapons Handling System.

JATO– Jet-assist takeoff.

JETTISON— Releasing of an airborne weapon or store by an emergency or secondary release system.

LABS— Low altitude bombing system.

LALS— Linkless Ammunition Loading System.

LBI– Loss by inventory.

LDGP– Low-drag, general purpose.

LEMA— Linear electromechanical actuator.

LGB– Laser-guided bomb.

LGTR– Laser guided training round (LGTR).

LSFFAR– Low-spin, folding-fin, aircraft rocket.

MACH— A measurement of sonic speed under standard atmospheric conditions. Mach 1.0 is about 766 miles per hour.

MDD– Maintenance due date.

MER— Multiple ejector rack

MIARS— Maintenance Information Automated Retrieval System.

MILSTRIP— Military Standard Requisitioning and Issue Procedures.

MIM– Maintenance instruction manual.

MMMU— Mobile missile maintenance unit.

MOAT– Missile on aircraft test.

MOD– Modification.

MOMAT— Mobile mine assembly team.

MRC– Maintenance requirements card.

NADEP– Naval ammunition depot.

NALC– Naval ammunition logistics code.

NAPI– Naval Aeronautic Publications Index.

NAR– Naval ammunition reclassification.

NATO– North Atlantic Treaty Organization.

NATOPS– Naval Air Training and Operating Procedures Standardization.

NATSF– Naval Air Technical Services Facility.

NAVAIR– Naval air.

NAVAIRSYSCOM– Naval Air Systems Command.

NAVSEASYSKOMINAVSEA— Naval Sea Systems Command.

NAVSUPSYSCOM/NAVSUP— Naval Supply Systems Command.

NAWMP– Naval Airborne Weapons Maintenance Program.

NIIN– National item identification number.

NOTE– An operating procedure, practice, or condition that is essential to highlight.

NSN– National stock number.

NWS— Naval weapons station.

OD– Ordnance data.

OIC– Officer in charge.

OHO– Ordnance handling officer.

OJT– On-the-job training.

OP– Ordnance publication.

PD– Point detonating.

PMIC– Periodic maintenance inspection cards.

PMS— Preventive Maintenance System.

PWP— Plasticized white phosphorus.

Q-D— Quantity-distance.

RAC— Rapid action change. Issued to provide timely information of changes to manuals.

RADHAZ— Radiation Hazards to Ordnance.

RAT— Ram air turbine.

RDD— Required delivery date.

REARMING AREA— That area where an operation that replenishes the prescribed airborne weapons/stores, ammunition, bombs, and other armament items for an aircraft is conducted. This operation may include fuzing and any stray voltage checks, as applicable.

RELEASE AND CONTROL SYSTEM CHECK— Functional test of an aircraft electrical/mechanical conventional weapon release and/or control subsystem.

RF— Radio frequency.

RIM— Ship-launched intercept-aerial guided missile.

RPM— Rounds per minute.

S&A— Safety and arming device.

SASS— Special armament stowage space.

SAT— Safe air travel.

SATS— Short airfield tactical site.

SEAM— Sidewinder expanded acquisition mode. A means of slaving the AIM-9 optics to the air intercept radar to enhance tactical employment.

SEB— Support equipment bulletin.

SEC— Support equipment change.

SHOLS— Single Hoist Ordnance Loading System.

SLC— Sonobuoy launch tube.

SPCC— Ships Parts Control Center.

SRC— Stores reliability card.

STRAY VOLTAGE— An undesired voltage existing between two specified points of a weapon system that is capable of producing a flow of current when a designated electrical measuring device is connected between the two points.

SWL— Safe working load.

SWP— Subordinate work package.

TACO or TACCO— Tactical coordinator.

TALD— Tactical air-launched decoy.

TCB— Target control system bulletin.

TDD— Target detecting device.

TER— Triple ejector rack.

TMDC— Type Maintenance Due code.

TMINS— Technical Manual Identification Numbering System.

TPDR— Technical Publication Deficiency Report.

TRAMAN— Training manual.

UNO— United Nations Organization.

UIC— Unit Identification Code.

VER— Vertical ejector rack.

VT— Proximity fuze, so called because the original devices contained one or more vacuum tubes.

WARNING— An operating procedure, practice, or condition that, if not correctly followed, could result in personal injury or loss of life.

APPENDIX II

REFERENCES USED TO DEVELOP THIS TRAMAN

NOTE: Although the following references were current when this TRAMAN was published, their continued currency cannot be assured. Therefore, you need to be sure that you are studying the latest revision,

Chapter 1

Airborne Weapons Assembly Manual, Mk 80/BLU Series Bombs and Practice Bombs, NAVAIR 11-140-5, Commander, Naval Air Systems Command, Washington, D. C., 1 August 1992.

Airborne Weapons Assembly Manual, Paveway I, II, III, LGB/GBU, NAVAIR 11-140-10, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992.

Airborne Weapons/Stores Loading Manual, Navy Model F-14A/B Aircraft, NAVAIR 01-F14AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1994.

Airborne Weapons/Stores Loading Manual, Navy Model F/A-18A/B/C/D Aircraft 161353 and Up, A1-F18AE-LWS-000, Commander, Naval Air Systems Command, Washington, D. C., 15 August 1994 1 July 1994.

Airborne Weapons/Stores Loading Manual, Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992.

Airborne Weapons/Stores Loading Manual, Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992.

Airborne Weapons/Stores Loading Manual, Navy Models A-6 Series, EA-6, and KA-6 Aircraft, NAVAIR 01-85AD-75, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1992 through Change 1 of 1 April 1994.

Aircraft General Purpose Bombs, Fire Bombs, Practice Bombs, and Components, NAVAIR 11-5A-17, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1994.

Antitank Bomb Clusters MK 20 Mods 2, 3, 4 And 6 (ROCKEYE) and Antipersonnel/Antimaterial Bomb Cluster CBU-59/B (APAM), NAVAIR 11-5A-3, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1983 through Change 1 of 15 January 1989.

Description and Characteristics Airborne Bomb and Rocket Fuze Manual, NAVAIR 11-1F-2, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1985 through Change 2 of 30 January 1993.

Dispenser and Mine Aircraft Weapon CBU-78/B (GATOR), NAVAIR 11-5A-33, Commander, Naval Air systems Command, Washington, D. C., 3 December 1987.

Laser Guided Bombs GBU-12C/B, GBU-12D/B, GBU-16A/B, GBU-16B/B, GBU-10D/B, GBU-10E/B, NAVAIR 01-15MGD-1, Commander, Naval Air Systems Command, Washington, D. C., 15 March 1987 through Change 3 of 1 January 1992.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 2

2.75-Inch Airborne Rocket Launchers, NAVAIR 11-75A-61, Commander, Naval Air Systems Command, Washington, D. C., 15 June 1991 through Rapid Action Change 1 of 1 April 1993.

5.0-Inch Airborne Rocket Launchers LAU-10 Series, NAVAIR 11-75A-63, Commander, Naval Air Systems Command, Washington, D. C., 1 April 1988.

Airborne Rockets, NAVAIR 11-85-5, Commander, Naval Air Systems Command, Washington, D. C., 1 January 1992.

Description and Characteristics Airborne Bomb and Rocket Fuze Manual, NAVAIR 11-1F-2, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1985 through Change 2 of 30 January 1993.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 3

Aircraft Guided Missile Launcher, LAU-7/A Series, NAVAIR 11-75A-54, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1993 through Rapid Action Change 7 of 1 December 1993.

Aircraft Guided Missile Launcher, LAU-115/A, A/A, B/A, CIA, AW-394AC-750-000, Commander Naval Air Systems Command, Washington, D. C., 1 June 1994.

Aircraft Guided Missile Launcher, LAU-118(V)1/A, NAVAIR 11-75A-78, Commander, Naval Air Systems Command, Washington, D. C., 1 June 1990,

Aircraft Guided Missile Launcher, LAU-117A(V)2/A, NAVAIR 11-75A-79, Commander, Naval Air Systems Command, Washington, D. C., 1 April 1993.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

Sidewinder Guided Missile AIM-9H/L/M and Training Missile, NAVAIR 01-AIM9-2, Commander, Naval Air Systems Command, Washington, D. C., 1 January 1987 through RAC 10 of February 1991.

Walleye I Guided Weapons, Mk 21 all Mods and Mk 29 all Mods, NAVAIR 01-15MGA-3-2, Commander, Naval Air Systems Command, Washington, D. C., 1 January 1988.

Walleye II Guided Weapons, Mk 5 Mod 6, Mk 23 all Mods, and Mk 30 all Mods, NAVAIR 01-15MGB-3-2, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1984.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 4

Dispenser SUU-25F/A, NAVAIR 11-75AA-48, Commander, Naval Air Systems Command, Washington, D. C., 1 October 1990.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

Pyrotechnic, Screening Marking and Countermeasure Devices, NAVSEA SW050-AB-MMA-010/NAVAIR 11-15-7, Volume 1, Revision 1, Commanders, Naval Sea Systems and Naval Air Systems Command, Washington, D. C., 1 July 1994.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 5

Airborne Weapons/Stores Loading Manual Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992,

Airborne Weapons/Stores Loading Manual Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992,

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 6

Ammunition For Navy 20-MM/25-MM Aircraft Guns, Description, Characteristics, Safety, Maintenance and Packaging, NAVAIR 11-1-119, Commander, Naval Air Systems Command, Washington, D. C., 30 September 1993.

Ammunition Handling and Gun Drive System, NAVAIR 11-95M61A1-2, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1988.

Gun System, A1-F18AC-750-300, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1986 through Change 1 of 1 November 1986 (A1-F18AC-750-300A).

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D, C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 7

Ammunition For Navy 20-MM/25-MM Aircraft Guns Description, Characteristics, Safety, Maintenance and Packaging, NAVAIR 11-1-119, Commander, Naval Air Systems Command, Washington, D. C., 30 September 1993.

Ammunition Handling and Gun Drive System, NAVAIR 11-95M61A1-2, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1988.

Linkless Ammunition Loading System, Consisting of Conveyor System, Loader Ammunition transporter, Drum Unload Assembly, Drum Loader Assembly, NAVAIR 19-1-125, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1988

Maintenance Armament Systems F-14A and F-14A(PLUS) Aircraft, NAVAIR 01-F14AAA-2-4-13, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1983 through Change 11 of 15 November 1993.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 8

Aerial Tow Targets And Associated Equipment, NAVAIR-28-10A-501, Commander, Naval Air Systems Command, Washington, D. C., 1 April 1990.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 9

Airborne Weapons Support Equipment Description and Characteristics, NAVAIR 11-140-24, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1990,

Approved Handling Equipment For Weapons and Explosives, NAVSEA OP 2173, Volume 1, and NAVAIR 19-100-1.1, Commander, Naval Sea Systems Command, Washington, D. C., 15 June 1971 through Change 5 of 1 July 1981.

Handling Ammunition, Explosives, and Hazardous Materials with Industrial Materials Handling Equipment (MHE), NAVSEA OP 4098, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 1 December 1978 through Change 2 of 15 February 1982.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 10

Bomb Rack BRU-12/A and MAU-38/A, NAVAIR 11-5C-23, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1974 through Change 2 of 15 June 1978.

Bomb Rack Models AERO 65A Series, NAVAIR 11-5E-50, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1982 through Change 1 of 1 August 1986.

Bomb Rack BRU-14/A and BRU-15/A, NAVAIR 11-5E-18, Commander, Naval Air Systems Command, Washington, D. C., 1 September 1990 through RAC 5-15 April 1994.

Ejector Rack Assembly BRU-32/A, AW-382AC-750-000, Commander, Naval Air Systems Command, Washington, D. C., 5 June 1989 through Change 1 of 11 August 1989.

Improved Multiple Ejector Rack (IMER) BRU-41/A, Improved Triple Ejector Rack (ITER) BRU-42/A, NAVAIR 11-5-603, Commander, Naval Air Systems Command, Washington, D. C., 1 April 1988.

Multiple Ejector Rack (MER) and Triple Ejector Rack (TER), NAVAIR 11-75A-57, Commander, Naval Air Systems Command, Washington, D. C., 23 January 1978 through RAC 3 of 15 October 1984.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

Rack Ejector Bomb BRU-10/B, and Models BRU-10A/B thru BRU-11A/A, NAVAIR 11-10C-24, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1986 through RAC 1 of 5 February 1987.

Rack Ejector Bomb BRU-10/B and Models BRU-11/B, BRU-10/A, BRU-11/A, NAVAIR 11-10C-20, Commander, Naval air systems Command, 1 February 1986 through RAC 1 of 5 February 1987.

Vertical Ejector Rack assembly BRU-33/A and BRU-33A/A, AW-382AC-750-010, Commander, Naval Air Systems Command, Washington, D. C., 19 June 1989 through Change 1 of 1 February 1993.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 11

Airborne Weapons Packaging/Handling/Stowage (Shipboard), Volume 1, NAVAIR 11-120A-1.1, Commander, Naval Air Systems Command, Washington, D. C., 15 July 1981 through Change 8 of 15 September 1989.

Ammunition Afloat, NAVSEA OP 4, Fifth Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 17 of 01 November 1994.

Electromagnetic Radiation Hazards (U), (Hazards to Ordnance) (U), NAVSEA OP 3565/NAVAIR 16-1-529/NAVELEX 0967-LP-624-6010, Volume II, Part One, Sixth Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 July 1989 through Change 4 of 15 September 1993.

Electromagnetic Radiation Hazards (U), (Hazards to Personnel, Fuel and Other Flammable Material) (U), NAVSEA OP 3565/NAVAIR 16-1-529/NAVELEX 0967-LP-624-6010, Volume 1, Fifth Revision, Commander, Naval Sea Systems Command, Washington, D. C., 1 November 1979 through Change 2 of 15 July 1982.

Handling and Stowage of Air-Launched Weapons Aboard Amphibious Ships, SG420-B5-WHS-010, Commander Naval Sea Systems Command, Washington D. C., 30 November 1986 through Change G NNSY 30 September 1993.

Handling and Stowage of Amphibious Assault Ammunition Aboard Amphibious Ships, NAVSEA OP 4550, Commander, Naval Sea Systems Command, Washington, D. C., 15 March 1979 through Change 1 of 15 April 1987.

Handling and Stowage of Naval Ordnance Aboard Ammunition Ships, NAVSEA OP 3206, Volume 1, Commander, Naval Sea Systems Command, Washington D. C., 15 November 1977 through Change 2 of 15 September 1982.

Identification of Ammunition, NAVSEA SW010-AF-ORD-010/NAVAIR 11-1-117, Commanders, Naval Sea Systems and Naval Air Systems Command, Washington, D. C., 1 September 1990.

Magazine Sprinkling Systems, S9522-AA-HBK-010, Revision 1, Commander, Naval Sea Systems Command, Washington, D. C., 15 April 1989 through Change B of 30 September 1991.

Naval Air Training Operational procedures Standardization (LHA/LPH/LHD NATOPS), NAVAIR 00-80T-106, Chief of Naval Operations, Washington D. C., 1 August 1994.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Naval Ships Technical Manual, Locks, Keys, and Hasps, S9086-UK-STM-010/CH-604, Commander, Naval Sea Systems Command, Washington, D. C., 1 September 1986 through Change 1 of 1 April 1987.

Naval Ships Technical Manual Shipboard Ammunition Handling and Stowage, S9086-XG-STM-010/CH-700, Commander, Naval Sea Systems Command, Washington, D. C., 28 September 1990 through Change 1 of 31 July 1991,

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972,

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 12

Ammunition And Explosives Ashore Advanced Bases, NAVSEA OP 5, Volume 3, Fourth Revision, Commander, Naval Sea Systems Command, Washington, D. C., 1 September 1994.

Ammunition and Explosives Ashore Safety Regulations for Handling, Storing Production, Renovation and Shipping, NAVSEA OP 5, Volume 1, Fifth Revision, Commander, Naval Sea Systems Command, Washington, D. C., 1 August 1990 through Change 3 of 1 March 1994.

Conventional Weapons Handling Procedures Manual (Ashore) NATOPS, NAVAIR 00-80T-103, Commander, Naval Air Systems Command, Washington, D. C., 15 June 1990.

Motor Vehicle and Railcar Shipping Inspector Manual For Ammunition, Explosives and Related Hazardous Materials, NAVSEA OP 3681, Third Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 April 1977 through Change 6 of 1 April 1991.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Navy Ammunition Logistic Code, NAVAIR 11-1-116B, Commander, Naval Air Systems Command, and Commander, Naval Sea Systems Command, Washington, D. C., 1 October 1993.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 13

Airborne Weapons/Stores Loading Manual Navy Model F-14A/B Aircraft, NAVAIR 01-F14AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1994.

Airborne Weapons/Stores Loading Manual Navy Model F/A-18A/B/C/D Aircraft 161353 and Up, A1-F18AE-LWS-000, Commander, Naval Air Systems Command, Washington, D. C., 15 August 1994 July 1994.

Airborne Weapons/Stores Loading Manual Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992.

Airborne Weapons/Stores Loading Manual Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992.

Airborne Weapons/Stores Loading Manual Navy Models A-6 Series, EA-6, and K4-6 Aircraft, NAVAIR 01-85AD-75, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1992 through Change 1 of 1 April 1994.

Conventional Weapons Handling Procedures Manual (Ashore) NATOPS, NAVAIR 00-80T-103, Commander, Naval Air Systems Command, Washington, D. C., 15 June 1990,

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 14

Airborne Weapons/Stores Loading Manual Navy Model F-14A/B Aircraft, NAVAIR 01-F14AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1994.

Airborne Weapons/Stores Loading Manual Navy Model F/A-18A/B/C/D Aircraft 161353 and Up, A1-F18AE-LWS-000, Commander, Naval Air Systems Command, Washington, D. C., 15 August 1994.

Airborne Weapons/Stores Loading Manual Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992.

Airborne Weapons/Stores Loading Manual Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992.

Airborne Weapons/Stores Loading Manual Navy Models A-6 Series, EA-6, and KA-6 Aircraft, NAVAIR 01-85AD-75, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1992 through Change 1 of 1 April 1994.

Naval Aii-home Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 15

Airborne Weapons/Stores Loading Manual Navy Model F-14A/B Aircraft, NAVAIR 01-F14AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1994,

Airborne Weapons/Stores Loading Manual Navy Model F/A-18A/B/C/D Aircraft 161353 and Up, A1-F18AE-LWS-000, Commander, Naval Air Systems Command, Washington, D. C., 15 August 1994.

Airborne Weapons/Stores Loading Manual Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992.

Airborne Weapons/Stores Loading Manual Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992.

Airborne Weapons/Stores Loading Manual Navy Models A-6 Series, EA-6, and KA-6 Aim-aft, NAVAIR 01-85AD-75, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1992 through Change 1 of 1 April 1994.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

Chapter 16

Airborne Weapons/Stores Loading Manual Navy Model F-14A/B Aircraft, NAVAIR 01-F14AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 February 1994,

Airborne Weapons/Stores Loading Manual Navy Model F/A-18A/B/C/D Aircraft 161353 and Up, A1-F18AE-LWS-000, Commander, Naval Air Systems Command, Washington, D. C., 15 August 1994.

Airborne Weapons/Stores Loading Manual Navy Model P-3 Aircraft, NAVAIR 01-75PA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 March 1992 through Change 1 of 1 September 1992.

Airborne Weapons/Stores Loading Manual Navy Model S-3 Aircraft, NAVAIR 01-S3AAA-75, Commander, Naval Air Systems Command, Washington, D. C., 1 July 1992 through Change 1 of 1 October 1992.

Airborne Weapons/Stores Loading Manual Navy Models A-6 Series, EA-6, and KA-6 Aircraft, NAVAIR 01-85AD-75, Commander, Naval Air Systems Command, Washington, D. C., 1 May 1992 through Change 1 of 1 April 1994.

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

Chapter 17

Naval Airborne Weapons Maintenance Program (NAWMP), OPNAVINST 8600.2B, Chief of Naval Operations, Washington D. C., 1 September 1994.

Ordnance Safety Precautions, Their Origin and Necessity, NAVORD OP 1014, Third Revision, Commander, Naval Ordnance System Command, Washington, D. C., 15 August 1972.

Conventional Ammunition Integrated Management System, SPCCINST 8010.12D, Ships Parts Control Center, Mechanicsburg, Pennsylvania, 2 September 1991 through Change 13 of 3 September 1992.

United States Navy Ordnance Safety Precautions, NAVSEA OP 3347, Second Revision, Commander, Naval Sea Systems Command, Washington, D. C., 15 February 1972 through Change 11 of 15 April 1982.

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